

DOCKET FILE COPY ORIGINAL

ORIGINAL
RECEIVED

Before the
FEDERAL COMMUNICATIONS COMMISSION
Washington, D.C. 20554

MAY 15 1998

FEDERAL COMMUNICATIONS COMMISSION
OFFICE OF THE SECRETARY

In the Matter of

Federal-State Joint Board on
Universal Service

)
)
)
)

CC Docket Nos 96-45, 96-160
DA 98-715

COMMENTS OF BELL ATLANTIC ON NEW PROPOSALS

Of Counsel

Edward D. Young, III
Michael E. Glover

Edward Shakin
Joseph DiBella
Lawrence Katz

1320 North Court House Road
Eighth Floor
Arlington, VA 22201
(703) 974-4864

Attorneys for the Bell Atlantic
telephone companies

Dated: May 15, 1998

No. of Copies rec'd 015
List A B C D E

TABLE OF CONTENTS

| | <u>PAGE</u> |
|---|-------------|
| Introduction | i. |
| I. The Need for a Federal Fund Is Limited | 2 |
| II. The Ad Hoc Principles Provide A Foundation For A Solution | 3 |
| III. Bell Atlantic's Modifications to Ad Hoc's Proposal | 11 |
| IV. Other Proposals Should Be Rejected | 12 |
| Conclusion | 17 |

Introduction

Alone among the proposals submitted to the Commission, the NARUC Ad Hoc working group recognizes fundamental principles that meet the needs of consumers in both low and high cost states. Central to these principles is the statutory concept of a limited federal universal service fund to supplement the primary role of its partners in the states. As a result, the role of the federal fund is appropriately limited to providing support where the costs of a state are so high that it would lack the ability to maintain universal service with an intrastate solution. This avoids the specter of moderate income customers paying a surcharge to maintain relatively lower rates for wealthy customers in another state.

The Ad Hoc proposal appropriately provides support on a state-wide basis and relies on a cost benchmark, not a revenue benchmark to determine fund size and distribution.

While Bell Atlantic endorses the general principles identified by Ad Hoc, it would modify the Ad Hoc proposal in several respects. Bell Atlantic proposes to limit the fund size by eliminating unneeded “hold-harmless” protections for relatively low cost states over a three year transition. The total fund under Bell Atlantic’s proposed modifications to Ad Hoc would be no larger than the current fund – a result that is appropriate given the current high levels of subscribership. At the same time, Bell Atlantic’s proposed modifications would provide a safe harbor for rural companies and for insular rural areas by continuing their funding at existing levels. While proxy models should not be used for any purpose because they do not reflect actual costs, Bell Atlantic’s modifications would permit the results to be used for the limited purpose of comparing relative costs among the states and achieving the universal service mandate required by Congress.

As the Commission balances competing demands in universal service funding, it should adopt a truly federal fund that works in conjunction with the states and avoids overburdening of telephone customers in the guise of protecting them.

**Before the
FEDERAL COMMUNICATIONS COMMISSION
Washington, D.C. 20554**

RECEIVED

MAY 15 1998

FEDERAL COMMUNICATIONS COMMISSION
OFFICE OF THE SECRETARY

| | | |
|------------------------------|---|-----------------------------|
| In the Matter of |) | |
| |) | |
| Federal-State Joint Board on |) | CC Docket Nos 96-45, 96-160 |
| Universal Service |) | DA 98-715 |
| |) | |

COMMENTS OF BELL ATLANTIC¹ ON NEW PROPOSALS

Two fundamental facts should underlie any federal universal service plan. First, the federal fund does not stand by itself, but is a partner with the primary role played by state policies to maintain universal service. Second, phone service is already universally available. Both of these facts point toward a more limited fund that assists those states and companies that lack the ability to assure continued universal service by distributing support to address extra-ordinary cost differences among the states without massive redistributions of wealth from one group of states to another.

Only Ad Hoc's proposal recognizes these principles. Even its proposal cannot be used without modification because it relies on a proxy model, which like all proxy models, does not reflect actual costs. By using the proxy models for the limited purposes of reflecting only the relative difference in costs among states and by modifying the results to reflect actual costs as proposed by Bell Atlantic, the Commission can achieve the universal service result mandated by Congress.

¹ The Bell Atlantic telephone companies ("Bell Atlantic") are Bell Atlantic-Delaware, Inc.; Bell Atlantic-Maryland, Inc.; Bell Atlantic-New Jersey, Inc.; Bell Atlantic-Pennsylvania, Inc.; Bell Atlantic-Virginia, Inc.; Bell Atlantic-Washington, D.C., Inc.; Bell Atlantic-West Virginia, Inc.; New York Telephone Company; and New England Telephone and Telegraph Company.

I. The Need For A Federal Fund Is Limited

As the Commission and industry participants struggle to develop a plan for universal service that is consistent with the Act, will meet the actual needs of states, and will not result in economic harm to carriers or their customers, it is easy to lose sight of what has already been accomplished in providing telephone service to the American people. The Commission and the federal-state universal service joint board have found that local rates nationwide are “generally affordable,” with an overall subscribership rate of approximately 94%. *Report and Order*, 12 FCC Rcd 8776, ¶ 112 (“Universal Service Order”), *citing Recommend Decision* at 154. There are pockets of concern where penetration is lower, both in certain geographic areas and in certain segments of the population.² But these pockets are the exceptions, and the fact remains that the statutory universal service mandate is not the *achievement* of universal service, but rather its “preservation and advancement.” 47 U.S.C. § 254(b)(4).

As a result, the Commission should be wary of overblown proposals that would dramatically increase a fund that has already shown itself to be adequately sized. These proposals would skew the market by unnecessarily increasing the flow of subsidies among various states and regions of the country.

Similarly, the Commission should be wary of proposals that seek to usurp the role of the states and offer expensive federal fixes to local problems. The Act recognized the important role states play in the assurance of universal service. In particular, the Act

² The Joint Board and the Commission have taken significant steps to augment universal service programs for low-income consumers. These programs address pockets of lower subscribership levels by strengthening the safety-net for those potential subscribers.

preserved to the states the right to adopt their own universal service mechanisms that “do not rely” on the federal program. 47 U.S.C. § 254 (f). The statutory requirement is that the state and federal mechanisms must *together* be sufficient to preserve universal service. 47 U.S.C. § 254(b)(5). This means that the states must address problems that can be solved within a single state, and that the federal role should be limited to those concerns that require a distribution of funds from one state to another. As the Chairman has explained:

The vast bulk of universal service support today is generated and spent within the boundaries of each state. This means that the real key to subsidy reform is state, rather than federal action. The law directs the Commission to ensure that service is affordable and comparable, and the Commission clearly must provide a universal service ‘safety net.’ But the bulk of subsidies will continue to be raised and distributed within the boundaries of any single state.

Remarks by William E. Kennard to Legg Mason “Telecom Investment Precursors”
Workshop, Washington, DC, 1998 WL 110193 (Mar. 12, 1998).

Among the proposals received by the Commission, only Ad Hoc’s recognized this balanced partnership between the federal and state jurisdictions. As a result, Bell Atlantic focuses its comments on the Ad Hoc group proposal, and suggests modifications that are consistent with the key principles outlined in their proposal.

II. The Ad Hoc Principles Provide A Foundation For A Solution

The principles outlined by Ad Hoc provide a sound basis for a universal service fund solution. They recognize the current achievement of universal service and the statutory federal-state partnership.

1. **Intrastate Purpose.** As stated above, the limited purpose of the federal high cost fund is to meet the universal service needs that cannot be addressed at the state level. This means that federal support should be targeted to high cost *states*, as these states will

have the greatest difficulty in supporting universal service through intrastate mechanisms. The Commission's proposed *interstate* mechanism focuses on high cost areas *within* a state, *regardless of whether the state as a whole has above average costs*. This fails to distinguish between states that can address universal service issues through internal intrastate mechanisms and those that need additional help. The Ad Hoc proposal, however, provides money directly to the states that need assistance to maintain affordable local service. This gives the states the option of deciding how best to apply those funds.

2. **Sufficiency.** The Ad Hoc proposal recognizes that "sufficiency" does not imply that the federal fund alone should bear the entire universal service burden. This leaves no role for state action and penalizes customers in those states that have rebalanced their local service rates to bring them closer to cost. Instead, the federal universal service plan should address only those state-wide costs that are too high to allow for an intrastate fix. Ad Hoc accepts this proposition in theory, but its proposal still includes a guaranteed funding support that goes beyond that need. As a result, the proposal creates a fund that is still too large and undermines its own principle of a minimal federal fund size.
3. **Minimal Size.** As the Chairman has recognized, the federal fund should be "the minimum necessary" to achieve the statutory purpose. Remarks by Chairman William E. Kennard to the National Association of State Utility Consumer Advocates (Feb. 9, 1998). Ultimately, any universal service assessment is a cost of doing business that is passed on to consumers. The smaller the fund size, the smaller the burden on those consumers. The Ad Hoc proposal increases total federal universal service support by

\$600 million.³ In contrast, the modifications outlined in Exhibit 1 not only address the greater need of high cost states, they also reflect the reduced need of relatively lower cost states that currently receive universal service fund support. Bell Atlantic's modifications include a cost benchmark for federal support at 115% of the nationwide average, based on the per-state relative cost of service.⁴ This is the identical benchmark level used for the pre-Act high cost support, one that has proved adequate over the last ten years to produce subscribership rates of 94%. As a result, the proposed modifications to the Ad Hoc proposal initially would maintain the total federal universal service support at today's level, with the potential for reductions in the fund over time.

4. **Assessment on Interstate Revenues.** In order to give states the opportunity to use state revenues to solve their intrastate universal service concerns, any Commission plan should not impose a burden on intrastate ratepayers. Were the Commission to violate this principle, consumers in some states -- where the same revenues would be taxed to support both a state and federal universal service fund -- would face a disproportionate burden that could not be sustainable. This would deny states the flexibility and means to complement the federal fund. Ultimately, the universal service "cure" would result in a decrease in purchases of telecommunications services and even a reduced level of penetration. Moreover, such an assessment is inconsistent with the legal limits on the Commission's jurisdiction. As set forth in section IV below, a federal assessment on state rates effectively regulates those rates in violation of section 2(b) of the Act, which

³ Although the fund size calculated by Ad Hoc is lower, it does not include \$471 million for Long Term Support, which Ad Hoc treats as a supplemental fund to its own. Ad Hoc Comments at 17.

fences off intrastate rate regulation exclusively to the province of the states. Consistent with the dictates of this principle, the Ad Hoc proposal is properly based solely on an assessment of interstate retail rates.

5. **Compatible with Competition.** Competitive neutrality does not only mean that the support is portable, which the Ad Hoc plan is. It also means that no subgroup of carriers – or their customers – is disproportionately burdened by universal service assessments. This is accomplished by funding the federal high-cost support only through assessments of interstate retail rates. This also means all carriers, including those still under price regulation, should be given an opportunity to recover the full amount of their assessment.
6. **Incentive for Investment.** Ad Hoc recognizes that the high cost funding mechanism should include incentives for upgrading and modernizing the network, particularly in areas where service does not currently meet the Commission's definition of universal service (such as areas that currently have party line service or obsolete switching equipment). However, actual investment carriers incur to provide local service must be the starting point in any cost development. The danger in departing from a complete reliance on actual costs is that the only alternative proposed by Ad Hoc is reliance on flawed proxy models. As detailed below (section IV), any cost proxy model, including the individual models proposed for use here, is not only a departure from a particular carriers' actual costs, but it is not even a reasonable measure of its forward looking

⁴ The Ad Hoc proposal uses a cost benchmark of 105% of actual costs.

costs. This is particularly true of the flawed HAI model used for illustrative purposes by Ad Hoc.⁵

Indeed, the results from the proposed models are wildly inconsistent. While these differences are most dramatic at the wire center level, where the model purports to calculate costs, the differences persist even where costs are aggregated at the state-wide level, which minimizes the variations. As is shown in Exhibit 2, even where the models produce similar amounts of nationwide funding for high cost, they produce significantly different results for a particular state.⁶ For this reason, the use of any one model carries a significant risk of over-estimating or under-estimating the amount of high cost support that is needed in a particular state.

Ad Hoc uses a proxy model to adjust actual cost, but even their use of a model is too direct. Moreover, they fail to account fully for those states in which historical costs may not reflect the full impact of future technological improvements. In addressing these concerns, Bell Atlantic would place at least three limitations on the use of forward looking cost models.

⁵ The HAI model “(1) does not represent the circumstances of an actual forward looking network, (2) does not have a realistic view of how real-world firms operate and grow, (3) ignores the potential impacts of competition, and (4) produces misleading and downward-biased estimates of the forward-looking costs of basic service.” Rebuttal Testimony of Timothy J. Tardiff at 27, Attachment 2 to Reply Comments of Bell Atlantic on Inputs, Expenses and Other Issues, *Federal-State Joint Board on Universal Service*, CC Dockets Nos. 96-45, 97-160 (filed Oct. 27, 1997).

⁶ Exhibit 2 shows the differences between the BCPM and HAI models in their estimates of the costs in each state that exceed 115% of the nationwide average cost benchmarks calculated by each model. Although the total nationwide costs for above-average states are similar (\$2.1 billion for BCPM and \$2.0 billion for HAI), the amounts by state vary widely, and inexplicably. For instance, HAI calculates half as much above-

First, the Commission should average the results of the two proposed models and then average those combined costs with actual costs. The result is that no one proxy model would be weighted more than 25%, and variances between the models would be blunted through the averaging process.

Second, because these results are only to be used to calculate statewide costs, there is further averaging that will mitigate some of the largest variances – those associated with the smaller geographic areas, such as a wire center, for which the models purport to measure costs.

Third, consistent with the Ad Hoc proposal, the use of any proxy models would be limited to help calculate state to state *relative* cost comparisons. In no sense should the models be used to determine actual costs within a state, much less for an individual company within a smaller geographic area.

7. **Compatible With Separations.** The Ad Hoc proposal recognizes that new universal service support mechanisms should not try to override other non-universal service cost recovery mechanisms that work well today. The jurisdictional separations rules assure that 25% of costs are recovered through interstate rates. In its reform of access charges, the Commission has adjusted rate elements so that these per-line costs are recovered through explicit rate elements on a per-line basis.⁷ Universal service funding need not and should not upset these mechanisms. The Ad Hoc plan appropriately addresses only the remaining 75% of costs that must be recovered through intrastate rates.

average costs for Iowa and Kentucky as BCPM, while HAI calculates twice as much costs for Nebraska and North Dakota as BCPM.

⁷ As a result, there is no “implicit subsidy” in the way these costs are recovered.

8. **Compatible With State Policies.** The Ad Hoc proposal respects both the right of states to set intrastate rates, and the obligation of states to determine their own intrastate universal service policies. To provide high-cost states with the support they need without impairing their ability to meet their own obligations, the Ad Hoc proposal properly provides funds directly to the states to use as appropriate and consistent with their individual policies concerning local rates.
9. **Success defined by the market.** By its nature, a national fund that redistributes telecommunications revenues from one carrier to another is a regulatory intrusion into the workings of the market. By minimizing that intrusion to what is necessary to assure continued universal service, the Commission will assure that carriers focus on market competition rather than subsidy collection as the key to financial success.
10. **Cost-based support.** As discussed above, the Ad Hoc proposal uses costs only as a measure of relative state-wide need, and not as an indicator of absolute cost level. As a result, with the limitations and modifications discussed above in connection with the sixth principle, Bell Atlantic supports Ad Hoc's recommendation to rely on a cost benchmark rather than a revenue benchmark.
11. **Single System.** The modifications proposed by Bell Atlantic go farther than Ad Hoc in supporting a single federal universal support system. While Ad Hoc incorporates the existing federal high cost and DEM weighting programs, it does not subsume Long-Term Support ("LTS"), which remains as a supplemental federal program. Consistent with the Commission's recognition of LTS as a universal service high-cost subsidy,⁸

⁸ See Universal Service Order, ¶ 757.

Bell Atlantic's proposed modification would incorporate LTS into the new federal program.

12. **Hold-Harmless.** In its attempt to accommodate all of the existing fund recipients by agreeing that each state is entitled to maintain at least the current funding levels, the Ad Hoc proposal fails to address the fundamental cost imbalances among the states. The modifications proposed here would eliminate that requirement but retain certain aspects that have a separate policy basis. In order to ameliorate the disruptive impact from the application of this new mechanism, Bell Atlantic proposes to phase-in the new funding amounts over a three year transition period for non-rural telephone companies.⁹

Moreover, Bell Atlantic proposes to allow rural carriers to maintain existing fund levels for at least the first three years. As the Chairman has pointed out, rural carriers are "undiversified" and "geographically very targeted."¹⁰ As a result the best policy may be "if it ain't broke, don't fix it." *Id.* After the three year phase-in for non-rural companies, rural carriers may have had sufficient time to prepare for a second stage that could treat them the same as all other carriers. The extended phase in also provides the Commission time to evaluate the potential impact on rural carriers and whether such treatment is appropriate. Should the Commission determine that continued funding of

⁹ The impact on non-high cost states is not as dramatic as might first be expected because these states benefit from a reduced assessment as a result of a smaller total fund than Ad Hoc proposes.

¹⁰ Remarks by Chairman William Kennard to USTA's Inside Washington Telecom Conference (Apr. 27, 1998). To assure that only those carriers that are appropriate for separate treatment are included, Bell Atlantic's proposal would define non-rural carriers for this purpose to be operating companies with greater than 100,000 lines at the statewide level or affiliated local telephone companies with an aggregate of 1 million or more lines nationwide.

rural carriers at existing levels is warranted, it could extend the phase in period as appropriate.

The proposed modifications would also protect physically remote geographic areas by holding their support at current levels.¹¹ As with rural carriers, appropriate calculation of costs for these areas “may be beyond the present capabilities” of the cost comparisons proposed by Ad Hoc or any other party. Comments of Puerto Rico Commission at 10. Using the current funding level as a floor assures these areas of continued federal support at a level that has been historically sufficient.

III. Bell Atlantic’s Modifications to Ad Hoc’s Proposal

Consistent with the principles identified in the Ad Hoc proposal, Bell Atlantic proposes modifications to that proposal to calculate the high cost fund. These proposed modifications determine the statewide average cost for universal service based on an average of actual costs and averaged proxy model results. Seventy-five percent (approximating the interstate portion) of average statewide costs (including loop, switching and transport) are compared to a national cost benchmark (115%), and any statewide costs above the benchmark are recoverable from the federal fund. Each state will receive its funded amount, and the state regulators will have the responsibility of distributing this amount within each state.

Starting January, 1999, this new federal universal service fund would transition from current levels to a new state-by-state level calculated using the above methodology for non-rural companies over a three year period. Rural companies would continue to receive

¹¹ These include Alaska, Hawaii, Guam, Puerto Rico, and the Marianna and the Virgin Islands.

their existing support during this transition, pending FCC evaluation of the rural universal service issues in a separate proceeding. In addition, this proposal would keep high-cost insular areas (including Alaska) at the current funding levels.

A more detailed description of these calculations, as well as projected state-by-state results is included in Exhibit 1 of this document.

IV. Other Proposals Should Be Rejected

Bell Atlantic's proposed modifications to the Ad Hoc plan are consistent with the requirements of section 254. Other parties, in contrast, have proposed massive federal programs based upon an assessment of total retail revenues (both interstate and intrastate), which are inconsistent with the federal/state partnership embodied in the Act. *See, e.g.*, proposals of BellSouth, GTE, Sprint and US West. Moreover, many of these proposals rely on individual proxy models to determine actual costs for a small geographic area. Such reliance is misplaced and undermines the credibility of any results.

Some of the plans vastly overstate the amount of the existing implicit interstate support to high-cost universal service. The current amount of interstate high-cost universal service support is \$1.7 billion,¹² and the Act requires only this amount to be made explicit. There is no validity to the claims of GTE and Sprint that the current fund is far higher.¹³

¹² This includes approximately \$825 million of high-cost support payments, \$471 million of Long Term Support, and \$428 million of DEM weighting.

¹³ GTE estimates the current interstate high-cost support level at \$6.3 billion, while Sprint alleges that the figure is between \$13 and \$20 billion.

GTE, for example, uses all of the switched access revenues of all non-rural incumbent local operating companies (except for subscriber line charges), less the incremental costs of the same number of access minutes.¹⁴ This calculation vastly overstates the support. Interstate access rates have been reduced through price cap regulation, but their historical underpinning was the recovery of the actual costs of the local exchange carriers, measured in conformance with the Commission's cost accounting rules, including those shared costs assigned through separations for interstate recovery. These are legitimate costs that the exchange carriers incur to provide service and certainly cannot be considered a subsidy of any kind. To the extent that the interstate rate mechanisms may have caused high volume customers to pay a disproportionate share of these interstate costs, the Commission has dealt with that issue through its restructure of access rates to better reflect cost causation. *See Access Charge Reform*, 12 FCC Rcd 15982 (1997).

Nor is there any validity to GTE's argument that the Commission must – or should – replace all interstate and intrastate subsidies of every kind with a massive federal program. The only relevant requirement in the statute is that any *interstate universal service* support be “explicit and sufficient.” 47 U.S.C. § 254(e). GTE points to no section that requires that all implicit subsidies currently in interstate rates must be made explicit and recovered through the fund, because none exists. Nor does the Act require, or even permit, the Commission to ferret out all *intrastate* subsidies and include them in the federal fund. Section 2(b) of the Act gives the states complete authority over

¹⁴ GTE at n.27. Sprint does not say how it derived its even more inflated figure.

intrastate rates. 47 U.S.C. § 152(b). “By its terms, this provision fences off from FCC reach or regulation intrastate matters -- indeed, including matters ‘in connection with’ intrastate service.” *Louisiana Pub. Serv. Comm’n v. FCC*, 476 U.S. 355, 370 (1986). Moreover, section 2(b) “contains not only a substantive jurisdictional limitation on the FCC’s power, but also a rule of statutory construction” that limits the Commission’s authority under any other provision of the Communications Act. *Id.* at 373; *see id.* at 376 n.5.¹⁵ Nor does section 254 authorize federal action to reform intrastate rates--whatever level of “implicit subsidies” (from urban to rural area, from business to residential customers, from second lines to first lines, from optional to basic services, from toll to non-toll calls) such rates may embody.

Similarly flawed are those proposals that would base universal service contributions on total interstate and intrastate retail revenue.¹⁶ The federal-state partnership in the Act contemplates that each partner can tap revenues within its sphere to fund its part of universal service support. If federal fund contributions were based upon both interstate and intrastate revenues, carriers with primarily intrastate revenues would be severely disadvantaged, because their revenues would be taxed again by those states with their own intrastate funds. This double dipping from intrastate revenues, in turn, would lead to higher local rates to recover those contributions in states that have instituted their own programs. This result could cause states to decline to initiate needed

¹⁵ See also *First Gibraltar Bank, FSB v. Morales*, 42 F.3d 895, 899 (5th Cir. 1995) (“We conclude, therefore, that the Supreme Court interpreted the ‘shall be construed’ language of § 152(b) as a legitimate limitation on the scope of authority delegated by Congress to the FCC.”).

¹⁶ Staurulakis at 3, 7; GTE at 28-29; Sprint at 8.

intrastate universal service programs and undermine Congressional intent in enacting section 254.

Most of the alternative proposals also rely on a single proxy model and then use it to attempt to predict costs at a census block group or wire center level, rather than determining state-wide costs. But such reliance is misplaced, given the known failings of these models. As Bell Atlantic and other commenting parties demonstrated in response to the Commission's *Further Notice*, 12 FCC Rcd 18514 (1997), the proxy models currently before the Commission contain systemic flaws that produce arbitrary results from state to state.

Proxy models attempt to determine the forward-looking cost of constructing a brand new local telephone network to serve all of the existing residential and business customers in the country using existing wire center locations. The enormity of this task is not helped by the lack of basic data such as the exact location of each customer or the numbers of lines to each customer location. The models started by using Census Bureau data and statistical methods to estimate the numbers of customers, their locations, and the numbers of lines. *Further Notice* at ¶¶ 39-53. This resulted in a very poor fit between the number of customer lines in each wire center and the actual number of lines.¹⁷ It also

¹⁷ In fact, the sponsors of the HAI model felt that it was unfair for the Commission to expect the models to come within 10 percent of the actual number of customer lines in a wire center. See Docket 96-45, Comments of AT&T and MCI at 10-11 (filed Sept. 2, 1997).

produced large variations in the customer locations depending on what algorithms the models used to distribute customers throughout the area served by a wire center.¹⁸

For these reasons, the models start with an inaccurate picture of the customer base. They then construct hypothetical designs of a network that would be built from scratch using all new switches and the latest least cost technology. This does not represent the forward-looking costs that either the incumbent or a new entrant would actually incur, since no existing carrier could reasonably replace all of its equipment with the latest technology, and no new entrant would have the economy of scale associated with serving the entire customer base. The models also suffer from an overriding limitation in terms of the numbers of variables which can be taken into account in designing the hypothetical outside plant. While the models include such factors as terrain, slope, and soil type, they cannot possibly include all of the factors that influence the design and placement of outside plant. For instance, they do not identify natural obstacles such as rivers and mountains, or other obstacles such as zoning restrictions and existing buildings, parks, etc. In place of the actual data that network engineers use to design outside plant, the models use geometric algorithms and simplified assumptions about the type of plant to be used in each density zone. Consequently, the models result in networks that have never been built, and never actually could be built.

¹⁸ Lately, the model sponsors and the Commission have been pursuing the use of “geocoded” data (data on the longitudinal and latitudinal location of each customer) to more precisely define each customer’s location. See CC Docket No. 97-160, March 24, 1998 letter from A. Richard Metzger, Jr., Chief, Common Carrier Bureau, seeking voluntary submission of geocoded data. However, it has yet to be shown if there is a reliable source of geocoded data, particularly for rural customers that live in the highest cost areas.


Finally, the proxy models results are highly sensitive to the network design philosophies that are incorporated in the model algorithms. The models vary significantly in the use of aerial, underground, or buried plant, the use of digital loop carrier, and myriad other design factors. For instance, the HAI model assumes far more extensive use of copper in feeder plant than the BCPM, or than is consistent with current industry practices. The model results also vary significantly due to large differences in values for cost inputs, depending on whether the model proponents are trying to minimize or maximize the size of the high cost funding requirement.

The result of these factors is that the two proxy models currently before the Commission vary widely in the amount of high cost support that they calculate and reliance on *any* single model is misplaced.

Conclusion

The Commission should adopt a limited federal fund consistent with the Ad Hoc principles and Bell Atlantic's proposed modifications to their plan.

Respectfully submitted,

By: 
Edward Shakin
Joseph Dibella
Lawrence Katz

Of Counsel

Edward D. Young, III
Michael E. Glover

1320 North Court House Road
Eighth Floor
Arlington, VA 22201
(703) 974-4864

Attorneys for the Bell Atlantic
telephone companies

Dated: May 15, 1998

Proposed Modifications to Ad Hoc's Plan

The following is a list of assumptions that were used to generate the calculations in Exhibit 1:

- Sum of USF Loops - Since the proxy models still do not contain consistent loop counts, the loop counts collected and filed by USAC on 1/30/98, at the FCC, were relied upon for this exercise. This assumption is consistent with the line counts used by the Ad Hoc Working Group in their proposal filed with the FCC on 4/28/97. (Column B)
- The Current Support is the projected 1998 statewide universal service subsidy estimated by USAC. (Column C)
- The Hold Harmless Subsidy for Small Rural Companies (Column D) was developed by eliminating non-rural companies. Non-rural companies were defined as operating companies with greater than 100K lines at the statewide level or affiliated local telephone companies with an aggregate of 1 million or more lines nationwide. Statewide Hold Harmless equals the level of universal service funding (LTS, DEM, High Cost) projected by USAC for 1998. In contrast to the Ad Hoc Working Group's proposal, Long Term Support is included.
- For the 50% Combined & 50% Actual exercise, the AMC (average monthly cost) per line data to develop the 50% combined was generated at the state wide level by equally combining the weighted average costs per line from both the BCPM 3.1 (capped) and the HAI 5.0a. This average monthly cost data was then added to the statewide actual cost data reported in the Ad Hoc Proposal and divided by 2. (Column E)
- The benchmarks equal approximately 115% of the average monthly cost (i.e., approximately \$35.00/month) generated in each exercise for the 50 states, DC and Puerto Rico.
- The New Statewide USF Subsidy (Column F) is calculated by subtracting the average monthly cost from the benchmark, multiplying by the USAC loops and annualizing. Since 25% of the requirement is recovered in access charges, this aggregate amount is then multiplied by .75.
- The Proposed Support (Column G) is equal to the greater of the Hold Harmless for Small Companies (Column D) and the New Statewide USF using 50% Comb. & 50% Actual AMC (Column F).
- The transition plan is designed to phase in over a three year period. States will have current subsidy levels adjusted upward or downward as appropriate over the phase in period. During the three year transition period, the current statewide subsidy levels will be adjusted to proposed support level at a rate of approximately 33% annually. (Column H)

Proposed Modifications to Ad Hoc's Plan

Exhibit 1

| A | B | C | D | E | F | G | H |
|-------------|----------------------|---|---|------------------------------|---|------------------|---------------------|
| | USAC Loans & Subsidy | | | Calc. New Statewide USF Sub. | | | |
| State | Sum of USF Loans | Current Statewide Subsidy, Annualized (USF, DEM, LTS) | Hold Harmless for Small Rural Companies | 50% Comb & 50% Actual AMC | New Statewide USF using 50% Comb & 50% Actual AMC | Proposed Support | Change over 3 Years |
| AK | 377,416 | \$62,597,604 | \$62,597,604 | \$36.50 | \$62,597,604.00 | \$62,597,604 | \$0 |
| AL | 2,312,101 | \$39,274,860 | \$22,682,400 | \$36.22 | \$25,386,868.98 | \$25,386,869 | (\$13,887,991) |
| AR | 1,318,280 | \$70,701,192 | \$36,147,528 | \$43.01 | \$95,034,805.20 | \$95,034,805 | \$24,333,613 |
| AZ | 2,541,549 | \$28,723,608 | \$10,189,632 | \$32.02 | \$0.00 | \$10,189,632 | (\$18,533,976) |
| CA | 20,809,548 | \$55,285,308 | \$30,822,924 | \$24.56 | \$0.00 | \$30,822,924 | (\$24,462,384) |
| CO | 2,452,764 | \$45,893,436 | \$41,073,084 | \$34.23 | \$0.00 | \$41,073,084 | (\$4,820,352) |
| CT | 2,010,578 | \$1,399,680 | \$1,399,680 | \$30.17 | \$0.00 | \$1,399,680 | \$0 |
| DC | 901,311 | \$0 | \$0 | \$17.43 | \$0.00 | \$0 | \$0 |
| DE | 507,860 | \$0 | \$0 | \$24.95 | \$0.00 | \$0 | \$0 |
| FL | 9,897,855 | \$24,235,140 | \$16,963,092 | \$29.14 | \$0.00 | \$16,963,092 | (\$7,272,048) |
| GA | 4,513,317 | \$72,279,888 | \$49,460,556 | \$34.35 | \$0.00 | \$49,460,556 | (\$22,819,332) |
| HI | 693,630 | \$897,516 | \$897,516 | \$32.09 | \$897,516.00 | \$897,516 | \$0 |
| IA | 1,539,592 | \$27,500,136 | \$25,668,916 | \$37.10 | \$29,098,288.80 | \$29,098,289 | \$1,598,153 |
| ID | 642,252 | \$28,936,632 | \$16,425,936 | \$38.94 | \$22,774,255.92 | \$22,774,256 | (\$6,162,376) |
| IL | 7,714,111 | \$21,584,928 | \$19,964,484 | \$26.11 | \$0.00 | \$19,964,484 | (\$1,820,444) |
| IN | 3,342,142 | \$16,500,984 | \$15,503,484 | \$30.62 | \$0.00 | \$15,503,484 | (\$997,500) |
| KS | 1,523,369 | \$57,721,656 | \$39,261,888 | \$38.11 | \$42,639,098.31 | \$42,639,098 | (\$15,082,558) |
| KY | 1,966,504 | \$25,611,804 | \$11,208,288 | \$37.42 | \$43,266,057.12 | \$43,266,057 | \$17,654,253 |
| LA | 2,340,006 | \$67,614,840 | \$65,039,544 | \$35.05 | \$1,053,002.70 | \$65,039,544 | (\$2,575,296) |
| MA | 4,273,186 | \$417,800 | \$417,800 | \$26.88 | \$0.00 | \$417,800 | \$0 |
| MD | 3,344,003 | \$588,636 | \$588,636 | \$25.98 | \$0.00 | \$588,636 | \$0 |
| ME | 775,211 | \$16,551,732 | \$16,335,516 | \$39.98 | \$34,744,957.02 | \$34,744,957 | \$18,193,225 |
| MI | 6,028,449 | \$33,670,200 | \$29,644,908 | \$28.34 | \$0.00 | \$29,644,908 | (\$4,025,292) |
| MN | 2,773,994 | \$37,414,656 | \$33,343,980 | \$32.61 | \$0.00 | \$33,343,980 | (\$4,070,876) |
| MO | 3,192,721 | \$50,440,560 | \$28,167,648 | \$34.95 | \$0.00 | \$28,167,648 | (\$22,272,912) |
| MS | 1,270,809 | \$28,185,488 | \$16,627,044 | \$43.91 | \$101,906,173.71 | \$101,906,174 | \$73,740,686 |
| MT | 488,467 | \$44,155,068 | \$42,809,556 | \$50.35 | \$67,481,716.05 | \$67,481,716 | \$23,326,648 |
| NC | 4,453,425 | \$40,577,496 | \$22,666,872 | \$34.42 | \$0.00 | \$22,666,872 | (\$17,910,624) |
| ND | 393,878 | \$21,197,016 | \$21,197,016 | \$46.58 | \$41,029,121.16 | \$41,029,121 | \$19,832,105 |
| NE | 958,710 | \$19,706,664 | \$18,646,644 | \$40.19 | \$44,781,344.10 | \$44,781,344 | \$25,074,680 |
| NH | 770,057 | \$9,046,716 | \$8,177,904 | \$34.53 | \$0.00 | \$8,177,904 | (\$868,812) |
| NJ | 5,894,827 | \$3,282,276 | \$1,153,296 | \$23.25 | \$0.00 | \$1,153,296 | (\$2,128,980) |
| NM | 862,940 | \$35,243,244 | \$26,002,800 | \$39.79 | \$37,201,343.40 | \$37,201,343 | \$1,958,099 |
| NV | 1,122,489 | \$8,859,732 | \$7,675,524 | \$25.88 | \$0.00 | \$7,675,524 | (\$1,184,208) |
| NY | 12,308,488 | \$37,931,772 | \$24,083,412 | \$29.56 | \$0.00 | \$24,083,412 | (\$13,848,360) |
| OH | 6,488,115 | \$14,766,612 | \$14,766,612 | \$29.23 | \$0.00 | \$14,766,612 | \$0 |
| OK | 1,869,687 | \$59,899,752 | \$45,769,176 | \$37.69 | \$45,265,122.27 | \$45,769,176 | (\$14,130,576) |
| OR | 1,909,459 | \$37,091,748 | \$34,728,912 | \$33.79 | \$0.00 | \$34,728,912 | (\$2,362,836) |
| PA | 7,689,723 | \$25,552,656 | \$15,280,380 | \$25.86 | \$0.00 | \$15,280,380 | (\$10,272,276) |
| PR | 1,188,082 | \$145,852,320 | \$145,852,320 | \$38.85 | \$145,852,320.00 | \$145,852,320 | \$0 |
| RI | 625,327 | \$0 | \$0 | \$27.68 | \$0.00 | \$0 | \$0 |
| SC | 2,042,697 | \$45,209,328 | \$28,352,844 | \$36.94 | \$35,665,489.62 | \$35,665,490 | (\$9,543,838) |
| SD | 395,137 | \$16,806,792 | \$16,806,792 | \$47.55 | \$44,630,724.15 | \$44,630,724 | \$27,823,932 |
| TN | 3,161,392 | \$27,766,632 | \$27,766,632 | \$33.42 | \$0.00 | \$27,766,632 | \$0 |
| TX | 11,286,718 | \$124,215,300 | \$91,359,504 | \$32.34 | \$0.00 | \$91,359,504 | (\$32,855,796) |
| UT | 1,022,290 | \$8,403,012 | \$8,403,012 | \$30.62 | \$0.00 | \$8,403,012 | \$0 |
| VA | 4,166,624 | \$13,671,552 | \$8,995,884 | \$29.63 | \$0.00 | \$8,995,884 | (\$4,675,668) |
| VT | 380,284 | \$11,843,472 | \$9,869,256 | \$43.12 | \$27,791,154.72 | \$27,791,155 | \$15,947,683 |
| WA | 3,333,124 | \$43,494,372 | \$17,281,152 | \$31.40 | \$0.00 | \$17,281,152 | (\$26,213,220) |
| WI | 3,172,890 | \$51,445,152 | \$45,912,648 | \$30.36 | \$0.00 | \$45,912,648 | (\$5,532,504) |
| WV | 930,411 | \$21,184,260 | \$3,124,524 | \$42.69 | \$64,393,745.31 | \$64,393,745 | \$43,209,485 |
| WY | 272,633 | \$21,358,524 | \$16,614,036 | \$46.93 | \$29,272,605.21 | \$29,272,605 | \$7,914,081 |
| St. DC & PR | 166,250,030 | \$1,702,569,552 | \$1,293,928,596 | \$30.36 | \$1,042,763,314 | \$1,713,045,360 | \$10,475,808 |
| GU | 0 | \$1,065,924 | \$1,065,924 | n/a | \$1,065,924 | \$1,065,924 | \$0 |
| MCR | 18,837 | \$4,910,796 | \$4,910,796 | n/a | \$4,910,796 | \$4,910,796 | \$0 |
| VI | 58,315 | \$16,245,684 | \$16,245,684 | n/a | \$16,245,684 | \$16,245,684 | \$0 |
| Total | 166,327,182 | \$1,724,791,956 | \$1,316,151,000 | n/a | \$1,064,985,718 | \$1,735,267,764 | \$10,475,808 |

Comparison of HAI 5.0a and BCPM 3.1 Model Results By State

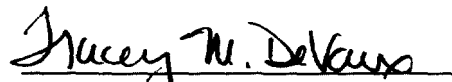
Exhibit 2

| State | Current Statewide Subsidy, Annual (USF, DEM, LTS) | BCPM 3.1 Cost Above 115% of Average | HAI 5.0a Cost Above 115% of Average |
|-------------|---|--|--|
| AK | \$62,597,604 | \$0 | \$0 |
| AL | \$39,274,860 | \$152,168,495 | \$126,992,274 |
| AR | \$70,701,192 | \$218,950,068 | \$116,228,336 |
| AZ | \$28,723,608 | \$0 | \$0 |
| CA | \$55,285,308 | \$0 | \$0 |
| CO | \$45,893,436 | \$0 | \$0 |
| CT | \$1,399,680 | \$0 | \$0 |
| DC | \$0 | \$0 | \$0 |
| DE | \$0 | \$0 | \$0 |
| FL | \$24,235,140 | \$0 | \$0 |
| GA | \$72,279,888 | \$0 | \$0 |
| HI | \$897,516 | \$0 | \$0 |
| IA | \$27,500,136 | \$214,800,159 | \$111,552,492 |
| ID | \$28,936,632 | \$49,199,630 | \$59,249,906 |
| IL | \$21,584,928 | \$0 | \$0 |
| IN | \$18,500,984 | \$0 | \$0 |
| KS | \$57,721,656 | \$75,400,422 | \$112,197,939 |
| KY | \$25,611,804 | \$134,792,841 | \$63,198,368 |
| LA | \$67,614,840 | \$0 | \$0 |
| MA | \$417,600 | \$0 | \$0 |
| MD | \$588,636 | \$0 | \$0 |
| ME | \$16,551,732 | \$54,065,464 | \$58,096,845 |
| MI | \$33,670,200 | \$0 | \$0 |
| MN | \$37,414,656 | \$45,280,654 | \$63,792,371 |
| MO | \$50,440,560 | \$113,621,889 | \$71,267,931 |
| MS | \$28,165,488 | \$216,088,713 | \$142,120,937 |
| MT | \$44,155,068 | \$95,530,200 | \$176,197,337 |
| NC | \$40,577,496 | \$0 | \$72,106,943 |
| ND | \$21,197,016 | \$76,698,494 | \$143,408,563 |
| NE | \$19,706,664 | \$74,939,491 | \$149,462,106 |
| NH | \$9,046,716 | \$0 | \$0 |
| NJ | \$3,282,276 | \$0 | \$0 |
| NM | \$35,243,244 | \$43,262,499 | \$85,345,666 |
| NV | \$8,859,732 | \$0 | \$0 |
| NY | \$37,931,772 | \$0 | \$0 |
| OH | \$14,766,612 | \$0 | \$0 |
| OK | \$59,899,752 | \$151,393,528 | \$119,521,033 |
| OR | \$37,091,748 | \$0 | \$0 |
| PA | \$25,552,656 | \$0 | \$0 |
| PR | \$145,852,320 | \$0 | \$0 |
| RI | \$0 | \$0 | \$0 |
| SC | \$45,209,328 | \$63,294,482 | \$14,273,046 |
| SD | \$16,806,792 | \$94,709,493 | \$138,214,018 |
| TN | \$27,766,632 | \$15,420,215 | \$14,579,688 |
| TX | \$124,215,300 | \$0 | \$0 |
| UT | \$8,403,012 | \$0 | \$0 |
| VA | \$13,671,552 | \$0 | \$0 |
| VT | \$11,843,472 | \$39,495,205 | \$23,270,357 |
| WA | \$43,494,372 | \$0 | \$0 |
| WI | \$51,445,152 | \$8,180,374 | \$0 |
| WV | \$21,184,260 | \$144,567,554 | \$100,460,881 |
| WY | \$21,358,524 | \$33,083,223 | \$51,622,946 |
| St, DC & PR | \$1,702,569,552 | \$2,114,943,093 | \$2,013,160,003 |

The subsidy amount for each state equals the respective proxy model's statewide cost in excess of 115% of the model generated national average. In addition, the subsidy was calculated using each model's individual loop counts.

CERTIFICATE OF SERVICE

I hereby certify that on this 15th day of May, 1998 a copy of the foregoing "Comments of Bell Atlantic on New Proposals" was sent by first class mail, postage prepaid, to the parties on the attached list.


Tracey M. DeVaux

* Via hand delivery.